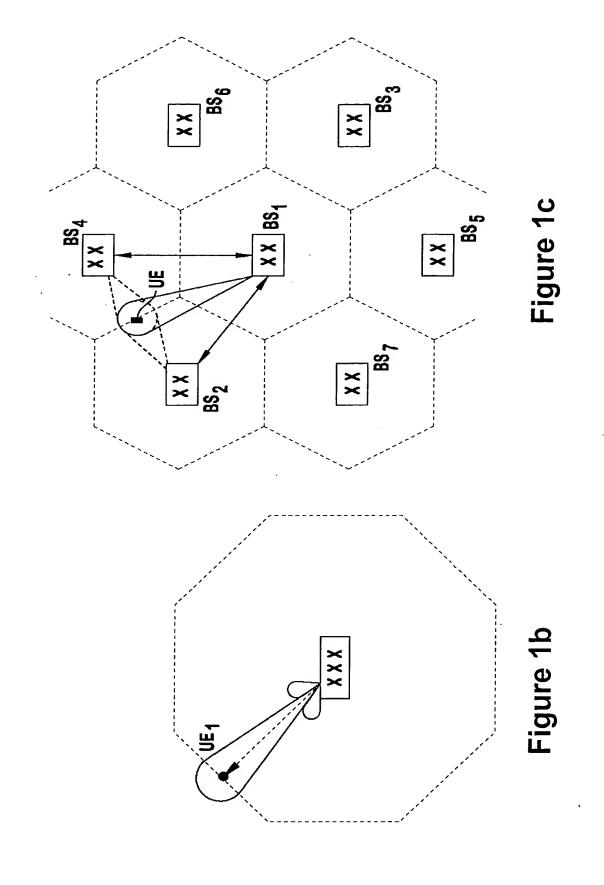


Figure 1a (Prior Art)



MOBILE UNIT EMITS A SOUNDING PULSE USING AN OMNIDIRECTIONAL ANTENNA 202

EACH BASE STATION THAT RECEIVES THE SOUNDING PULSE COMMUNICATE TO A RADIO ACCESS NETWORK (RAN)

204

RAN SELECTS RECEIVING BASE STATION
FOR COMMUNICATING WITH THE MOBILE
UNIT AND DETERMINES LOCATION OR
DIRECTION "TO" THE MOBILE UNIT
RELATIVE TO THE SELECTED BASE
STATION 206

THE SELECTED BASE STATION DIRECTS
THE TRANSMISSION OF COMMUNICATION
SIGNALS TOWARDS THE MOBILE UNIT
USING A SMART ANTENNA

208

Figure 2

MOBILE UNIT ENTERS A SERVICE AREA 302

MOBILE UNIT EMITS A SOUNDING PULSE AT A RELATIVELY LOW POWER 304

MOBILE UNIT STEPS UP POWER FOR EACH OF A SERIES OF SUBSEQUENT SOUNDING PULSES 306

ONE OR MORE BASE STATIONS DETECT AT LEAST ONE SOUNDING PULSE AND COMMUNICATES WITH A RADIO ACCESS NETWORK (RAN) 308

RAN SELECTS A BASE STATION AND CALCULATES THE LOCATION OF THE MOBILE UNIT RELATIVE TO THE SELECTED BASE STATION 310

SELECTED BASE STATION DIRECTS ONE OR MORE DOWN LINK COMMON CHANNELS TO THE MOBIL UNIT USING SMART ANTENNA TECHNOLOGY 312

MOBILE UNIT RECEIVES DOWNLINK
CHANNEL(S) AND COMMENCES
COMMUNICATIONS VIA THE SELECTED
BASE STATION 314

Figure 3

POWER OF RECEIVED DOWNLINK COMMON CHANNEL FALLS BELOW A THRESHOLD 402

MOBILE UNIT EMITS AT LEAST ONE SOUNDING PULSE

404

NEIGHBORING BASE STATIONS THAT RECEIVE THE SOUNDING PULSE, DIRECT TRANSMISSION OF DOWNLINK COMMON CHANNELS TOWARD THE MOBILE UNIT 406

MOBILE UNIT RESELECTS A BASE STATION
BASED ON THE POWER OF
RECEIVED DOWNLINK COMMON
CHANNELS FROM RESPECTIVE BASE
STATIONS

408

CELL REGISTRATION OF MOBILE UNIT IS PERFORMED WHERE NEIGHBORING BASE STATION IS SELECTED

410

Figure 4